Central Indiana October 2019 Climate Summary

53rd Warmest on Record at Indianapolis

21st Wettest on Record at Indianapolis

Temperatures

The hot weather experienced throughout the second half of September continued as the calendar turned to October, ushering in the hottest start to the year's tenth month in recorded history. High temperatures on the 1st and 2nd made it into the low 90s across central Indiana and in Indianapolis, both days reached 92° which established a new all-time record high for the month. October 1st and 2nd also marked just the 5th and 6th October days in recorded history where the temperature made it into the 90s in Indianapolis. In addition, the 70° low temperature on the morning of the 2nd was only the tenth low temperature in the 70s in October in Indianapolis on record.

A much welcomed cold front swept the heat away from the region on the 3rd with progressively cooler and more seasonable temperatures with daytime highs largely in the 70s most days through the 11th. Morning lows fell back into the 50s then the 40s. The 12th brought the first taste of fall in the wake of a cold front as highs remained mainly in the 50s after the first frosty morning of the season for many locations. Temperatures shifted to cooler than normal for the most part for the rest of October as just a few days experienced highs above 70° from the 13th through the end of the month. For the most part, highs were in the 50s and 60s with lows ranging from the upper 30s to around 50° throughout the second half of the month.

The coldest weather of the month and the season to date arrived on the 30th and 31st as a rainy, unsettled pattern ahead of a cold front held highs in the 40s. On Halloween, the front passed through central Indiana late morning with temperatures falling into the 30s through the afternoon and evening, providing the first hints that winter is not far away and making for miserable Trick or Treat conditions for the area. The first widespread hard freeze for the entire area came Halloween evening into the morning of November

1st as temperatures tumbled into the 20s. Many locations fell below freezing prior to midnight on Halloween.

The October high temperature of 92° and low temperature of 29° at Indianapolis produced a 63° spread for the month, which is the fourth largest temperature spread for the month of October on record, behind 1952, 1954 and 1965.

Site	October 2019	October 2019	Highest	Lowest
	Avg Temp	Difference	Temperature	Temperature
		from Normal		
Indianapolis	56.5	+1.5	92 on 1 and 2	29 on 31
Lafayette	54.2	-0.1	90 on 1	27 on 31
Muncie	57.8	+4.0	93 on 1 and 2	32 on 18 and 31
Terre Haute	55.5	+1.3	93 on 1	28 on 31
Bloomington	56.3	+1.7	93 on 1	29 on 31
Shelbyville	57.1	+2.9	92 on 1	32 on 18
Indy–Eagle Crk.	56.2	+1.4	91 on 1	30 on 31

At Indianapolis, there were 20 days with above normal average temperatures, 10 days with below average temperatures and 1 day with average normal temperatures.

October 2019 was the 53rd warmest in the Indianapolis area since 1871.

Precipitation

Much of the month remained dry across central Indiana with several rain events bringing the occasional relief to the ongoing drought conditions. The month began with much above normal temperatures, as highs for the first two days of the month topped out at 92 degrees, a new record for the latest 90 degree day at Indianapolis. Temperatures dropped some from there but remained above normal for the first 10 days of the month. After that, most of the remainder of the month saw near to just below normal temperatures. The heaviest rain occurred during the last 2 weeks of the month bringing around an inch and a half to five inches of rainfall to central Indiana over the course of three events.

While earlier in the month some isolated or minor rainfall events occurred, the first widespread significant rainfall for central Indiana arrived October 21st. On October 21-22, a strong frontal system moving through the Great Lakes brought rainfall of 1 to 2 inches across much of southern Indiana, but little if any fell along the Ohio River. Most of central Indiana saw between half an inch and an inch and a half, with lesser amounts across northern Indiana.

A heavy rain event began late the night of October 25th and continued throughout the day on the 26th. This brought from three quarters to over three inches of rain to central Indiana, with Gulf moisture drawn northward ahead of a cold front and interacting with a stalled warm front and slow moving upper wave. The highest amounts fell across central and western portions of the forecast area. Even with this heavier rainfall, area rivers and streams remained within their banks as much of the rainfall was absorbed by the dry ground and produced little runoff. Also of note with this system were wind gusts of 40 to 50 mph during the evening of the 26th in the wake of the cold frontal passage which produced a bit of tree damage and some power outages across the area.

The final rain event of the month arrived on October 30th ahead of a strong frontal system. Total precipitation amounts ranged from around half an inch to an inch across much of central Indiana, with one to two inches across north central and northern parts of the state. This system started with rain on the 30th, which transitioned to snow on Halloween day as a strong cold front moved through the state. These were the first snowflakes of the season seen in central Indiana, and measurable snow of a tenth to a few tenths of an inch was seen across northern and central portions of the area, with 0.8 measured from a CoCoRaHs observer at Kokomo. Most of the area saw snowflakes, but with the warm ground and rain beforehand most of the snow melted before it could accumulate. Some central Indiana cities and towns postponed Trick or Treating due to the forecast of 35 to 45 mph wind gusts and wind chills in the 20s and falling during the afternoon and evening.

These rounds of rainfall, along with near to just below normal temperatures over the second half of the month, improved drought conditions across much of the state.

Site	October 2019 Precipitation	October 2019 Difference from Normal	Wettest Day	Longest Dry Stretch
Indianapolis	4.48	+1.36	2.08 on 26	4 days 1-4 and 7-10
Lafayette	3.50	+0.61	1.36 on 26	4 days 1-4, 7- 10, 12-15 and 17-20
Muncie	2.54	-0.38	1.05 on 26	4 days 1-4
Terre Haute	5.44	+1.87	1.79 on 26	5 days 16-20
Bloomington	4.76	+1.23	2.20 on 26	4 days 1-4, 7-10 and 17-20
Shelbyville	5.13	+2.02	1.91 on 26	4 days 1-4 and 17-20
Indy–Eagle Crk.	4.29	+1.18	1.81 on 26	4 days 1-4 , 7- 10 and 17-20

October 2019 was the 21st wettest in the Indianapolis area since weather records began in 1871.

Severe Weather

There was no severe weather across central Indiana in October.

For information on severe weather in other areas during October, visit the Storm Prediction Center "Severe Weather Event Summaries" website at http://www.spc.noaa.gov/climo/online/.

Miscellaneous

The maximum wind gust at Indianapolis International Airport was 49 mph out of the northwest on the early morning of the 27th as strong winds impacted central Indiana in the wake of a frontal passage. Fog or haze was reported at Indianapolis on 10 days during the month, with dense fog occurring on the 10th. Thunder was reported on 3 days during October.

November 2019 Outlook

The official outlook for November 2019 from the Climate Prediction Center indicates a greater chance for below normal temperatures across central Indiana. At Indianapolis, the average temperature for the month is 43.6 degrees. The outlook also calls for a greater chance for near to below normal precipitation in November. The average precipitation for November at Indianapolis is 3.70" with 0.7" of snowfall.

Data prepared by the Indianapolis Forecast Office.